United States Department of Agriculture

Range Management

MAR 02 1988

Forest Service

Santa Fe National Forest

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Moir		
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Jaramillo		
Geberl		

Reply To: 2670

Date: March 1, 1988

Subject: Wood Lily Management Plan

To: District Rangers

Attached is the approved Wood Lily Management Plan. It was prepared by input from many sources on the Forest and in the R.O. under the leadership of Bruce Higgins. It is the first such management plan we have developed on this Forest. As such, it may be due to revision as we find out more about the lily or functions of single species management plans. For the time being, let's fully utilize this plan and use it as a standard in developing other species management plans.

M. T. Rost

MAYNARD T. ROST
Forest Supervisor

Enclosure

cc: Reggie Fletcher
Zone Biologists

FS-6200-28(7-82)

WOOD LILY MANAGEMENT PLAN
Santa Fe National Forest
April 1987

Prepared by: Bruce Higgins

Approved by: _____
Forest Supervisor

OUTLINE

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I. INTRODUCTION

This management plan is a first approximation of the management needs of Lilium Philadelphicum. As these guidelines are implemented and evaluated for effectiveness, the plan will be modified as needed. As a minimum, the plan will be evaluated and revised after five years. If surveys fail to find adequate populations (or population fragments that can be augmented) to provide for sufficient genetic diversity to ensure long-term survival within each of the various mountain ranges known to contain the plant, transplants will be made as needed to augment the number of populations. Adequacy of population numbers and size is one of the items to be evaluated at the end of the first five year period.

II. OBJECTIVE

The objective of the management plan for Lilium Philadelphicum is to provide adequate management considerations to ensure long-term maintenance within each of the mountain ranges where it now exists.

III. STATUS REPORT

A Status Report detailing the current condition of existing wood lily populations, what appears to be happening to these, and what we know and/or suspect about the effects of various activities on the lilies will be written by Reggie Fletcher by June 1, 1988. It will become a part of this management plan.

IV. INVENTORY

All inventories must be done while the lily is in bloom (usually in July). The Forest will develop a way to store, as a minimum, information on the location, abundance and plant communities where T&E plants are found. This will entail creation of a Forest database and/or use of SDB. Sightings of wood lilies may be recorded on the attached T&E plant sighting form. The completed forms, along with a 7 1/2 minute or larger scale map locating the population should be sent to the Forest Wildlife Biologist.

1) Projects - Within the upper white fir (ABCO) and lower spruce-fir (PIEN) Habitat Types, all projects which may affect the wood lily will be inventoried for the presence or absence of the lily before a Biological Evaluation can be made which determines the effect (if any) on the wood lily. For timber sales, the best time for this is during Intensive Reconnaissance.

2) Non-Project

   a. Extensive - Surveys ahead of planned projects may be done by individuals trained to recognize the lily. The results of these surveys may be used to define the need for intensive project surveys when projects come up.

   b. Status - Surveys done by Biologists which are similar to Extensive surveys, but also include determinations of relative occurrence, habitat parameters, density and other observations requiring a professional evaluation.

V. ACTIVITIES

1) Silvicultural

a. Stand Entries - All lily sites (one or more plants) within an activity area (cutting units, roads, etc.) will be protected from soil disturbances. Any exceptions will be addressed in a Biological Evaluation. Ensure that within the ISM (IRM) context, entries provide an array of modifications (including no modification); provided soil disturbance limitation is met, along with a lower limit on residual canopy cover for vegetation over 5' tall of 40%. GENERAL EXCEPTION: No treatment may occur within the lily population area itself if the next known population is greater than one mile away (minimum restriction). Soil disturbance immediately adjacent to the population may be prescribed to provide a suitable seedbed for expansion.

b. Slash Disposal - Mechanical or fire treatment should not be used to dispose of slash within the area of the lily population. Other slash treatments should be prescribed. Exceptions will be dealt with in a Biological Evaluation which will justify the deviation based on current state of knowledge or study needs.

2) Livestock

Where lilies are present they must be protected from increased livestock use (minimum restriction). This may require the use of access restriction, i.e., exclosures, drift fences or slash, or implementation of a variety of management systems (all yet to be tested on the lily). Populations below minimum viability (20) require special attention to ensure their increase toward viable population size.

Potential Lily Habitat - Where wood lilies are not currently present, but habitat information indicates they could be, management will be toward enhancement of vegetative conditions which may allow future occupancy or reoccupancy.

3) Other

a. Road, Trail and other Facility Construction and Reconstruction - will consider the effect of the project on the wood lily.

b. Fires - Decisions about preventing fire entry into population areas will be based upon existing knowledge about fire effects and inventory information.

Wildfires - No Biological Evaluation is required. No attempt will be made to protect wood lily populations from wildfires.

Prescribed Fires - Both Natural (FMA) and Planned Ignitions will require a Biological Evaluation that considers the effects on wood lily.

VI. MONITORING

All administrative study monitoring will be to determine the success of expansion of populations due to silvicultural practices. INITIALLY: Simple presence or absence of populations after treatments, both inside and outside the initial population areas, will be recorded. Consider the use of fixed photo points. Determine the viability of lily populations prior to treatment, using the criteria of at least 20 plants per acre to be viable.

VII. ADMINISTRATIVE & RESEARCH STUDY NEEDS

1) Pollenation biology - to determine minimum viable population size.

2) Habitat refinement - to determine the Habitat Types and thresholds.

3) Fire relationships

4) Mammal and Insect relationships

5) Transplant biology (seed and bulb)

6) Distribution

7) Hand pollenation feasibility and management

T & E PLANT SIGHTINGS - SANTA FE NATIONAL FOREST - _____ R.D.

Species: _____ Observer: _____ Date: ___-___-___

General Area: _____ UTM Coordinates: _____N, _____E

Plants in Pop: _____ Insect/Mammal Damage: _____ Distribution Type: ___

Phenological Stage: ___ Habitat Type: _____/_____/_____ % Bare Ground: _____

Current Species Mix- O/S: _____ U/S: _____

Avg. Tree Height: _____ft Avg. Tree DBH: _____in. Dist. to Water: _____ft

% Canopy Cover-O/S: _____ M/S: _____ U/S: _____ Elev: _____ft Slope: _____%

Aspect: _____ Position: _____ Soil Series: _____ Disturb? _____

Notes:

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